ments

In other words, they hold, and, as we think, justly, that the fact of the existence of a custom, or of a form of organization, of relatively pure breed, and, consequently, among two or more tribes is a proof of that the cephalic index is of little or no uniformity that cannot be gainsaid by dif- value as an indication of race. ferences that may have supervened in the way such a custom or system is observed. and followed.

Among the other questions that are here discussed and have for us a special interest, may be mentioned the fact that, in declaring their belief (pp. 56, 59, 108) in the former existence of group marriage among these people, our authors bear out Morgan's theory on this point, though the contrary opinion, as held by McLennan, Curr, and others, has, of late, been much in vogue. We are also told, somewhat to our surprise that "marriage by capture [pp. 103 and | relation to the feelings of the individual." 554], which has been so frequently described as characteristic of Australian tribes, is the very rarest way in which a Central Australian secures a wife," thus, of course, doing | level of development not yet attained by he seemed born. The ease with which he away with the account, once familiar to most of us, of a band of savages lying in wait | the scale of progress. Generosity, we may | sions and on little ones, was pretty to see. by a waterhole against the coming of the lubras for water, when such of them as were required were seized, "and, if they attempted to make any resistance, they were struck down insensible and dragged off." So, too, contrary to what we have hitherto been taught, we are now to learn that the practice of sub-incision could not have been instituted for the purpose of preventing or even checking procreation, for the simple reason (p. 264) that it does nothing of the kind. This is proved by the fact that "every man without exception throughout the central area, in all tribes in which the rite is practised, is sub-incised. . . . He must be before he is allowed to take a wife, and infringement of this rule would simply mean death to him if found out." Infanticide, not sub-incision, is said to be the explanation of the small size of the average family, and it is resorted to "not with any idea at all of regulating the food supply, so far as the adults are concerned, but simply from the point of view that, if the mother is suckling one child, she cannot properly provide food for another, quite apart from the question of carrying two children about." Powerful as this practice must have been in keeping down the population, it was probably not as destructive in its effects as was the belief in sorcery. Among them, for instance (and the same thing will apply to our Indians), "there is no such thing as belief in natural death; however old or decrept a man or woman may be when this takes place. it is at once supposed that it has been brought about by the magic influence of some enemy, and in the normal condition. of the tribe the death of one individual is followed by the murder of some one else Ipp. 48, 4761, who is supposed to be guilty of having caused the death."

In an appendix (C) we have a table of the bodily measurements of twenty men and ten women, the majority of whom belonged to the Arunta tribe. Limiting ourselves to the | no great feat, especially since they yield | pointed by the Society of Arts, and as this men and to what is termed the cephalic index, we find (p. 44) that it ranges from 68.8, to elucidate the constitution of their acid, supplemented by a Royal Commission of polithe different degrees of mesaticephalism to but this he failed to do. Apart from this, and at last Playfair was appointed "Special 80.55, which is just within the limit of subbrachycephal. As the group of which this tribe folims on an been, for "long ages" (p. | other with Joule-men of such fertility that | not large enough to make these jealousies

noted would seem to show that there is own theories-that the specific gravities of practically no limit to the differences that the elements are proportional to different may be found in the head-form of a people

In conclusion it may not be out of place to call attention to the fact that, rude as is the Australians' code of morals, "their conduct is governed by it [pp. 8, 12, 46], and any known breaches are dealt with both surely and severely." .Especially is this factory manner." true of the infractions of any regulation governing the intercourse between the sexes. These are punished by death (p. 110) or in some other severe manner, and, cu- dences of his practical resource, tact, coup riously enough, the reason assigned for such severity is (pp. 99, 100, etc.) that the plan, and energy; and, having once tried him offence is against the tribe, and "has no in those tasks where physical science and In thus transferring (p. 15) the duty of punishment from the individual to the tribe these people may be said to have reached a some of us who are rated much higher in add, is one of their leading features (p. 48). as it is always their custom to give a share of their food, or of what they may possess to their fellows, and particularly (p. 51) to the children and to the aged and infirm, who are unable to provide for themselves. Of course, there were times of scarcity, and possibly they were frequent here, owing to the inhospitable nature of the soil. But when times are favorable the "black fel- to the midday dinner. This seemed to dislow," so we are told (p. 53, 54), is lighthearted, lives in the present, and gives no table was small, and that there was absothought as to what the morrow may bring

"At night time men, women, and children gather round the common camp-fires, talk-lng and singing their monotonous chants hour after hour, until one after the other they drop out of the tircle, going off to their different camps, and then at length all will be quiet, except for the occasional cry of a child who, as not seldom happens, rolls over into the fire and has to be comforted or scolded into quietness. Granted always that his abundant, it may be said that the life of the Australian native is, for the most part, a pleasant one.'

## LYON PLAYFAIR. .

Memoirs and Correspondence of Lyon Playfair, First Baron Playfair of St. Andrews, By Wemyss Reid. Harper & Bros. 1899. Svo, pp. 487.

and "shut off from con- | one naturally attributes the main ideas of | unimportant. Sir Henry Cole had been the

has been developed along different lines in different localities." that with other peoples," the variation here the work to them. One at least of Playfair's different localities." powers of their atomic weights-is downright absurd. On the whole, the evidence is that his purely scientific genius was not extraordinary. That this was the opinion of Faraday is indicated by a letter in which, wishing to recommend Playfair, he limits himself to testifying that "you are able to expound the truths of experimental science in a clear, logical, audible, and to me satis-On the other hand statesmen like Sir Rob-

ert Peel and Prince Albert were struck at

their first interviews with him by the evid'wil, power of elaborating a workable the art of government overlap, would never thereafter allow him leisure for the pursuit of pure science. Thus he was carried in spite of himself into the business for which surmounted difficulties, both on great occa-"I arrived." he says, in the fragmentary autobiography upon which Mr. Reid builds. "at Kranichstein on Sunday morning. The Prince and his visitors having gone to chapel, and also the servants, Princess Alice kindly remained behind, in order to welcome me on my arrival. While we were conversing, a note came from Prince Louis to say that he would bring the Lutheran minister turb the Princess, who told me that her lutely no room for an additional guest, and as all the servants were at church, the table could not be relaid." What could the Princess expect Playfair to do about that? But people had learned to feel that there was no kind of difficulty which this politicoscientist was not fit to cope with. "I reminded her that she used to entertain me at the Swiss Cottage at Osborne when she was a child and that I knew she could lay a table better than servants. She was pleased with the suggestion, and we went to the dinng-room, took all the things from the table. put in a new leaf, and rearranged everything before the party returned to the house." A man of such American efficiency could not but be liked in palaces; and a little incident is as good evidence as a great one of his practical resource. Feats of nice tact are not to be explained

to all sorts of readers in a few words. Suffice The ambition of Lyon Playfair was at first | it to say that functions were continually dedirected towards scientific eminence. A volving upon Playfair to exercise which, pupil of two of the greatest chemists that without disastrous friction, was a task harder a man born in 1818 could have for masters, than ever the guardian of a fairy princess Graham and Liebig, he made several dis- set to semi-miraculous suitor. But Playfair coveries, as all chemists do. The chief of had the art of applying a little drop of luthese was that of the nitroprussides. A britant good sense just where it would incoffee-colored solution is formed by adding sinuate itself into the closest bearing. He nitric acid to ferrocyanide of potassium, and | usually went straight to the persons from something peculiar and interesting was whom antagonism was likely to develop. known to be contained in it. To neutralize | When the Great Exhibition of 1851 was prethe acid and isolate the resulting salts was paring, an executive committee was first apmagnificent crystals. Had Playfair gone on did not succeed in executing much, it was the extreme of dolichocephalism, through all he would have taken a considerable step; ticians. Still the manufacturers hung back, his two chief researches were carried on in | Commissioner," with powers \ just large collaboration, the one with Bunsen, the enough to insure perpetual jealquales, but

mainspring of the Exhibition from first to Exhibition of 1851 would certainly have ed Vice-President of the Council, practicallast. The reminiscences contain the following narrative:

Feb. 8, 1900]

When I joined the Executive of the Exhibition, Sir Henry Cole scarcely knew me, and, like the other members, was naturally displeased that I was placed in a position of confidence superior to theirs. On the second day after my appointment I met Sit Henry Cole in Whitehall, at the door of the Home Office. We told me frankly that he was going to see the Secretary of State to resign his connection with the Exhibition, and that his letter of resignation was then in his pocket. I took his arm and walked up and down Whitehall. On asking him whether he believed the ship was sinking, and that the Exhibition would be a total failure, he frankly admitted that he did, as the state of indifference of the manufacturing districts rendered failure almost certain. I then urged that, as he was the real pilot of the vessel, it was a wrong act to desert the sink-ing ship. The country could be aroused to the importance of the undertaking, and my work could be well separated from his, for I intended to visit the chief manufacturing centres in order to create a public sentiment in its support. Our conversation was mu-tually satisfactory, and we walked to the Exhibition office together, and his letter of resignation was destroyed. Had the accidental meeting not taken place, the Great Exhibition would never have been held, for its mainspring would have been broken. After this interview, if jealousies still continued, none were ever shown, for all the members of the Executive worked loyally to bring the

undertaking to a successful issue." The excellence of Playfair's coup d'ail was shown in this same business. That he should go straight to the manufacturers was only what his invariable habit dictated. But that he should have seen, in the midst of a confused state of affairs, that what was requisite to bring the manufacturers into hearty cooperation was simply to present to them a new classification of the objects of the Exhibition, such that each of them should clearly comprehend the parts that concerned him-this was what nobody else but Playfair had had the perspicacity to see, or was even able to see after it was pointed out, until the result proved his insight. The same affair illustrated also Playfair's capacity for elaborating a feasible plan. For he had not only to construct a detailed classification in which everything offered for exhibition should find a suitable section that seemed to ask particularly for that very thing, but he had so to construct it that the manufacturers would approve of it; that the Prince, who was wedded to a highly German classification of his own (in which most things either had no place or several places), would yield to it; and, most difficult of all, such that French and other foreign commissioners would surrender their own prepossessions, and cordially accept the new arrangement. But Playfair had all the elements of his problem so thoroughly studied and well in hand that, when it came to the execution, there was not a serious

As for his energy, we can compare it to nothing but that of a terrier in a room full of rats, with such incredible swiftness did the wickedest difficulties get their quietus under his action. It cannot be better evidenced than by enumerating say a dozen of the main achievements of his life. First, he greatly stimulated scientific agriculture in England by translating Liebig's books and conducting Liebig himself through the country; second, he considerably reduced the death-rate in England by his activity upon the Commission on the Health of Towns;

been a failure, and probably no great international exposition would have been held to the immense loss of material civilization; fourth, the whole science department, at least, of the establishments at South Kensington is entirely due to his management, together with the School of Science; fifth, he gave the initial impetus to technical education in England; sixth, the regulations of 1874 for filling places in the British Civil Service are due to him; seventh, he invented post-cards in 1870, and caused them to be brought into use; eighth, he considerably furthered first steps towards realization of the great ideal of general international arbitration; ninth, he was instrumental in bringing the Venezuelan imbroglio to a peaceful termination, which was finally effected by the adoption of his suggestions; tenth, he determined the choice of coal used by British steamers; eleventh, he saved the causes of vaccination and vivisection; twelfth, he stopped the cattle plague in England by severe measures. This is not all he did, but we stop the list at a dozen achieve-

At the close of the Exhibition, Playfair recelved'a gold medal, the companionship of the Bath, and the office of Gentleman Usher in the household of the Prince Consort. The Exhibition produced a profit of £190,000, and the question arose what should be done with this money and with the building. It was the Prince's idea that an institution should be founded. The House of Commons granted £150,000 additional, and the South Kensington estates were purchased. Playfair now made a tour of Northern Europe and Austria in order to study their educational systems, with special reference to science and technology. Coming home, he made a crusade in favor of what is called in England "technical education." This he did for the sake of its effect on British industry and civilization rather than for the young men to be educated; and the benefit near and remote to Great Britain at large has been immense. In 1858 he was appointed Professor of Chemistry in the University of Edinburgh, but he was so weighed down with duties imposed upon him by Government that he accomplished Httle purely scientific work. He did a great deal for educational methods there. In 1868 he was elected member of Parliament for the University of Edinburgh, being a Liberal representing a Conservative constituency; and he gave up his professorship. In 1873 he was made Postmaster-General. In 1874 the Gladstone Ministry went out, and Disraeli appointed Playfair Chairman of the Civil-Service Commission, which established the new system called the "Playfair Scheme." In 1875 he was influential in the selection of Hartington as leader of the Opposition, though he would have preferred Forster. In 1877 he first visited the United States, and the next year married a young lady of Boston. In 1880 he was tendered the post of first whip, but declined it, unwisely. He was appointed Chairman of the Committee of the Whole, as we should call it, and was obliged to bear the brunt of the cloture odium. In 1883 he resigned and was made Knight Commander of the Bath, or rather he supposed he had been, for he neglected the formality of receiving the accolade. so that he never was legally Sir Lyon Playfair. In 1885 he was elected to Parliament third, if it had not been for him, the Great | from South Leeds. In 1888 he was appoint-

ly 'Minister of Education in the House of Commons. In 1887 he headed a deputation who presented a memorial in favor of general arbitration to President Cleveland. In 1592 he was raised to the peerage, and made Lord-in-Waiting. In 1895 he received the honor of the Grand Cross of the Bath. He died in May, 1898.

It is delightful to read the biography of a man to whom life must have afforded a constant series of surprises to find himself so much cleverer than he had supposed. No wonder he was gay, sunny, sociable, entertaining, and affectionate. It is to be remarked that his peculiar good fortune never corrupted him in any way; for certainly a little healthy conceit is no fault, but a necessary quality. Without something like this, Playfair could not have passed through two periods of extreme unpopularity with such perfect equanimity as he did. The Life by Mr. Wemyss Reid brings out Playfair's character quite thoroughly, considering that it is one of those biographies which are prepared with the cooperation of intimate relatives of the subject. No little skill in the art of bookmaking has been put forth upon it. It is crammed with Playfair's amusing anecdotes, and is altogether a difficult book to drop. The index is thoroughly well executed.

The Writings of Thomas Jefferson. Collected and edited by Paul Leicester Ford. Vol. X. and last. 1816-1826. G. P. Putnam's Sons. 1899.

Mr. Ford himself will, we believe, be the last person to reproach us with delay in noticing the completion of his severe, yearlong task, which he has already well forgotten, seeking pastures new wherein to frolic with his historic imagination, and winning a multitude of readers who will never resort to his precious Jefferson volumes

In this final instalment the veteran statesman links himself with the next generation, now gone from the stage, by his panicky reprobation (January, 1816) of the Rev. Lyman Beecher for his "plan to establish 'a qualified religious instructor over every thousand souls in the United States'" the South not excepted. This he calls "the most bold and impudent stride New England has ever made in arrogating an ascendancy over the rest of the Union." But Jefferson could neither foresee Dr. Beecher's futile endeavor to suppress anti-slavery discussion at Lane Seminary, Cincinnati, nor his daughter's great tract of 'Uncle Tom.' In 1825 he professes to Fanny Wright his interest in her dreams for the abolition of slavery, but his views on gradual emancipation with colonization, elsewhere expressed, show him (like Henry Clay subsequently) unwilling to abate one lot of the slave-owner's pecuniary title to his property in human beings. There is also a single mention of Webster (December, 1824), whose visit to Monticello is recorded in his 'Private Correspondence,' which Mr. Ford fitly reproduces. Jefferson correctly thought Webster "likely to become of great weight in our government."

It is, however, the Spanish question which gives the more striking modernity to these letters. Jefferson had no doubt, in February, 1816, considering our sympathy with the revolted South American colonies, "that a war is brewing between us and Spain.